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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,665	06/14/2005	Sheng-Gen Pan	117393-025	4699
29177 7590 07/31/2008 BELF., BOYD & LLOYD, LLP P.O. BOX 1135 CHICAGO, IL 60690				
EXAMINER DUONG, DIEU HIEN				
ART UNIT 2821		PAPER NUMBER		
MAIL DATE 07/31/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/539,665

**Applicant(s)**

PAN, SHENG-GEN

**Examiner**

DIEU HIEN T. DUONG

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 April 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-10 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 6-10 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 29 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/CIS)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This office action is a response to applicant's amendment filed 04/29/2008. In virtue of this amendment, claims 1-5 are canceled; thus, claims 6-10 are currently in the instant application.

#### ***Drawings***

1. The drawing filed 04/29/2008 is acknowledged.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kane et al. (US 6,639,555 B1 of record), hereinafter "Kane".

Regarding claim 6, Kane discloses, in Figures 1 and 16, an antenna structure having a substantially flat form with a ground connection, which is designed for use for at least two frequency bands, comprising two antenna branches (152, 153), which are electrically conductively connected to a foot area, wherein the foot area surrounds the ground connection; two RF supply connections (154, 155) that are arranged at a distance from one another, provided in the foot area, between which the ground connection is provided, wherein the two antenna branches (152, 153) of the antenna structure are designed such that their associated frequency bands overlap; and an

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excitation circuit with an RF supply line, which branches to the two RF supply connections.

Fig. 1

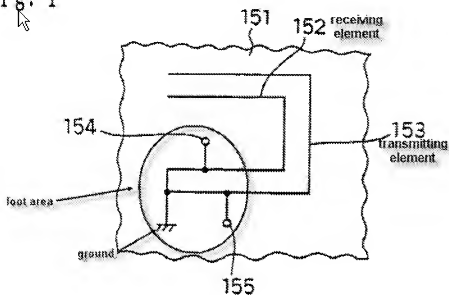
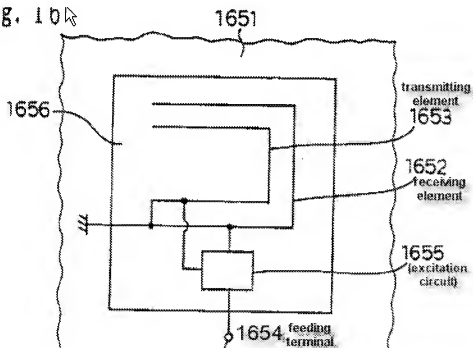


Fig. 1b



Regarding claim 7, as applied to claim 6, Kane discloses, wherein the antenna structure is a planar, inverted F structure.

Regarding claim 8, as applied to claim 6, Kane discloses, in Figure 6, wherein the two antenna branches (152, 153) of the antenna structure are each designed in a meandering shape.

Regarding claim 9, as applied to claim 6, Kane discloses, in Figure 6, wherein the two antenna branches (152, 153) are in the form of a double meander.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kane et al. (US 6,639,555 B1), hereinafter "Kane".

Regarding claim 10, Kane discloses every feature of claimed invention as expressly recited in claim 6, except for the distance between the two meandering antenna branches is in the range between 0.5 and 10 mm.

However, such difference is not of patentable merits since the distance can be determined to obtain desired radiation characteristics in a space requirement in the electronic device. Therefore, to employ having the distance between the two meandering antenna branches being in the range between 0.5 and 10 mm would have deemed obvious design choice to person skill in the art.

***Response to Arguments***

6. Applicant's arguments filed 04/29/2008 have been fully considered but they are not persuasive.

Applicant argues that Kane fails to disclose an excitation circuit.

Examiner respectfully disagrees.

Kane clearly discloses, in Figure 16, an excitation circuit (1655). Applicant is not specific about an excitation circuit in the disclosure to show how the excitation circuit is distinguished from the common component of the prior art. Therefore, the common component 1655 of the prior art is considered as the excitation circuit of claimed invention.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Inquiry***

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEU HIEN T. DUONG whose telephone number is (571)272-8980. The examiner can normally be reached on Monday - Friday, from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Owens can be reached on 571-272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

07/22/08

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/Douglas W Owens/  
Supervisory Patent Examiner, Art Unit 2821